

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Fixed and Mobile Services in Mobile Satellite)	ET Docket No. 10-142
Service Bands at 1525-1559 MHz and 1626.5-)	
1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500)	
MHz, and 2000-2020 MHz and 2180-2200 MHz)	
)	

COMMENTS OF NEW DBSD SATELLITE SERVICES G.P.

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SUMMARY

New DBSD Satellite Services G.P., Debtor-in-Possession (“DBSD”) supports the Commission’s twin objectives of ensuring robust MSS capabilities and increasing spectrum availability for mobile broadband networks. Both objectives will be best served by removing regulatory barriers and allowing additional flexible use of MSS spectrum to promote investment, innovation, and more efficient spectrum use.

Specifically, the Commission should apply the secondary market leasing framework to terrestrial use of MSS spectrum to ensure optimal spectrum use and facilitate market-driven deployment of advanced broadband services and technologies. To achieve the full benefits of the secondary market spectrum leasing framework, the Commission should allow MSS/ATC spectrum licensees and lessees the flexibility to choose from the full range of leasing options permitted under the existing framework, including spectrum manager and *de facto* transfer leasing. Additionally, because MSS/ATC leases do not raise the same competition concerns raised by certain terrestrial mobile leases, the Commission should allow these leases to qualify for immediate processing or approval procedures, regardless of the lessee’s interests in other terrestrial spectrum.

The Commission also should add co-primary terrestrial fixed and mobile allocations to the 2 GHz MSS band to allow additional flexibility in the future and provide globally harmonized spectrum, which will provide opportunities for standardized services, economies of scale, and reductions in service costs. Finally, the Commission should expeditiously initiate further proceedings to eliminate additional regulatory barriers and enable efficient use and enhancement of MSS spectrum for satellite and terrestrial broadband services and differentiated applications. These Commission actions are crucial to ensuring more efficient and cost-effective

use of MSS spectrum, as well as stimulating the capital investments required for swift deployment of the mobile broadband networks envisioned under Broadband Plan.

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COMMENTS OF NEW DBSD SATELLITE SERVICES G.P.

I. INTRODUCTION

New DBSD Satellite Services G.P., Debtor-in-Possession (“DBSD”), a mobile satellite service (“MSS”) operator authorized to provide satellite and ancillary terrestrial component (“ATC”) services in the 2 GHz band, submits these comments in response to the notice of proposed rulemaking and notice of inquiry in the above-captioned proceeding.¹

In its *NPRM/NOI*, the Commission seeks to adopt certain measures and to invite additional proposals “to remove regulatory barriers to terrestrial use, and to promote additional investments ... while retaining sufficient market-wide MSS capability.”² The *NPRM/NOI* represents a significant initial step toward achieving the important goals set forth in the National Broadband Plan (“Broadband Plan”) and implementing the Broadband Plan’s specific recommendations to enhance the efficiency of spectrum use and advance the public interest in ubiquitous broadband deployment.

¹ See *Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz*, Notice of Proposed Rulemaking and Notice of Inquiry, 25 FCC Rcd 9481 (2010) (“*NPRM/NOI*”).

² *Id.* ¶ 1.

DBSD supports the Commission’s twin objectives of ensuring robust MSS capabilities and increasing spectrum availability for mobile broadband networks. As the Commission recognized in the *NPRM/NOI* and the Broadband Plan, both objectives will be best served by removing regulatory barriers and allowing additional flexible use of MSS spectrum.³

The Broadband Plan recognizes that “[s]pectrum policy is the most important lever government has to help ensure [that] wireless and mobile broadband thrive.”⁴ Specifically, ensuring efficient spectrum allocations and increasing spectrum availability “will lower network deployment costs, making it easier for new companies to compete and enabling lower prices, more investment and better performance.”⁵ The Broadband Plan further notes that increasing spectrum availability for mobile broadband use does not require spectrum reallocations, but rather means “remov[ing] legacy constraints that limit the usefulness of a band” and “taking steps appropriate to the specific circumstances of individual bands.”⁶ Accordingly, the Broadband Plan recommends specific actions that will “increase terrestrial broadband use of MSS spectrum, while preserving market-wide capability to provide unique mission-critical MSS services.”⁷

As Chairman Genachowski emphasized, our country “need[s] *both* ground-based *and* satellite-based mobile broadband.”⁸ MSS systems play a critical role in providing services that are complementary to terrestrial wireless and wireline services, including essential primary

³ *Id.* ¶¶ 1-3; *Connecting America: The National Broadband Plan* at 87-88 (Mar. 16, 2010) (“*Broadband Plan*”).

⁴ *See id.* at 9.

⁵ *Id.* at 10.

⁶ *Id.* at 85.

⁷ *Id.* at 87.

⁸ *See NPRM/NOI*, Statement of Chairman Julius Genachowski (emphasis added).

communications services in unserved or underserved areas, back-up or restoration communications services where terrestrial systems become unavailable, and differentiated services for point-to-point and point-to-multipoint applications, as further discussed below. The Commission consistently has found that MSS systems serve a vital and unique role in protecting the public safety.⁹ MSS systems are uniquely capable of providing “instant global communications for civilians, public-safety organizations, and the military in areas where terrestrial facilities *do not exist or do not function*.”¹⁰ They “also permit law-enforcement, aid agencies and the public to communicate from remote locations on the land, on the sea or in the air.”¹¹

In view of the importance of both MSS and terrestrial broadband services, the *NPRM/NOI* is specifically designed to consider measures to “make our spectrum rules more flexible” to allow both uses.¹² This, in turn, “will catalyze investment and spark innovation, create jobs, help increase broadband speeds and capacity, and take an important step to make sure that America has the spectrum it needs to lead the world in mobile.”¹³

⁹ See, e.g., *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands*, Report and Order and Notice of Proposed Rulemaking, 18 FCC Rcd 1962, ¶ 28 n.61 (2003) (“*ATC Order*”) (“The Commission has repeatedly noted the ability of MSS systems to protect public safety.”); *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, Notice of Proposed Rulemaking, 10 FCC Rcd 3230, ¶ 7 (1995) (“MSS can provide nationwide public safety coverage. . . . [and] MSS could satisfy important requirements that cannot be economically satisfied by other means.”); *Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Service in the Upper and Lower L-band*, Notice of Proposed Rulemaking, 11 FCC Rcd 11675, 11681 ¶ 12 (1996) (“MSS can . . . meet rural public safety needs and provide emergency communications to any area in times of emergencies and natural disasters.”).

¹⁰ *ATC Order* ¶ 28.

¹¹ *Id.*

¹² *NPRM/NOI*, Statement of Chairman Julius Genachowski.

¹³ *Id.*

In light of the Commission's stated objectives, DBSD supports the proposals in the *NPRM/NOI* to (1) apply the secondary market leasing framework to terrestrial use of MSS spectrum; and (2) add co-primary terrestrial fixed and mobile allocations to the 2 GHz MSS band. The Commission also should expeditiously initiate further proceedings to eliminate additional regulatory barriers and enable efficient use and enhancement of MSS spectrum for satellite and terrestrial broadband services and differentiated applications, as further discussed below.

II. DBSD'S DEMONSTRATED COMMITMENT TO THE EVOLUTION OF MSS

DBSD has invested hundreds of millions of dollars to develop an MSS/ATC system and technologies that use spectrum to offer both satellite and terrestrial services. These investments include building and launching a next-generation geostationary MSS satellite, developing complementary chipset technology for end-user devices and performing trials validating a number of MSS/ATC communications protocols. DBSD's development efforts already have demonstrated the diverse and advanced capabilities of and potential for MSS/ATC networks offering voice, video, data and multimedia services, including establishing rapid-response mobile broadband and emergency communications services to support disaster relief and recovery efforts in Haiti.

MSS/ATC combines the unique advantages of ubiquitous satellite coverage with the capabilities of terrestrial wireless broadband networks. As a result, MSS/ATC is uniquely positioned to provide high-speed terrestrial broadband services and differentiated products, including advanced data, messaging, and machine-to-machine communications services to areas where terrestrial coverage does not exist or is otherwise insufficient to fulfill demand.

MSS/ATC systems also provide critical lifeline and restoration voice and data communications links during emergencies and natural disasters when terrestrial networks are unavailable.

In April 2008, DBSD launched the first-of-its-kind, next-generation geosynchronous MSS satellite. DBSD's G1 satellite utilizes an innovative two-way Ground Based Beam Forming ("GBBF") system delivering unprecedented flexibility to support a wide range of mobile technology standards. The G1's S-band phased-array antenna, combined with GBBF, provides the satellite system with the unprecedented capability to adjust, from the ground, communication beam size, shape, location, power, frequency assignments, and protocol employed. Transmit and receive capacity can be redistributed on a real-time basis, thus allowing the satellite system to be adapted to changing service needs and to support dynamic interaction with complementary terrestrial systems as traffic and business needs change.

DBSD has invested in multiple technologies to enable convenient end-user devices to provide seamless satellite and terrestrial services to facilitate a viable market. For example, in August 2006, DBSD, in partnership with Qualcomm, was the first operator to invest in the development of a satellite communication technology that could be integrated into a standard cellular chipset. Qualcomm used its standard chipset development platforms to create a prototype handset running the Enhanced Geostationary Air Link ("EGAL" or "Satellite-EVDO") protocol. At the CTIA Wireless Show and International Consumer Electronics Show in 2009, DBSD successfully demonstrated the capabilities of this protocol to provide voice and data communications using a cellular-class handset to communicate with DBSD's G1 satellite. DBSD continued investing with Qualcomm to make this capability available commercially in certain multi-mode chipsets. This will enable terminal original equipment manufacturers to provide a wide range of handheld and mobile computing devices capable of terrestrial broadband

connectivity across MSS frequency bands in addition to a wide range of spectrum used for terrestrial mobile services.

DBSD also invested in development and trialing of various technologies to further demonstrate the viability of differentiated services based on a complementary MSS/ATC network. These market trials successfully demonstrated use of the two-way IP protocol GMR1 and the first ever North American use of the Digital Video Broadcast – Satellite Handheld (“DVB-SH”) standard, a technology that simultaneously transmits over a single channel from satellite and terrestrial facilities to handheld and other mobile devices. These trials were the first to show operation of a hybrid Single Frequency Network (“SFN”), a technology providing significantly greater spectral efficiency than other hybrid satellite/terrestrial systems. These trials validated the differentiated service capabilities of hybrid satellite/terrestrial architectures and further demonstrated that these technologies can be integrated and offered in parallel. Further testing and analysis also have validated the capability for integration with various terrestrial mobile broadband technologies, including Long Term Evolution (“LTE”) and High Speed Packet Access (“HSPA”).

More recently, in a demonstration of the vital role that MSS/ATC systems can play in complementing and providing emergency redundancy to terrestrial communications networks, DBSD used the GMR1 system to provide satellite-based mobile broadband services and emergency communications support for disaster relief and recovery efforts in the wake of the devastating earthquakes that struck Haiti in January 2010. DBSD reconfigured the GMR1 system to take full advantage of the unprecedented flexibility of the two-way GBBF system to deliver Internet access services and concentrate coverage in support of crisis and disaster situations.

DBSD also provided on-site set up and training support for its ruggedized CFK 100 mobile broadband devices once they were deployed. These devices allowed International Telecommunication Union and Haitian relief officials to receive reliable, real-time communications and Internet access as they conducted their vital rebuilding missions throughout the country.

Throughout the successful support of the Haiti relief effort, DBSD was also able to continue with its market trials described above, as well as the Qualcomm development and testing initiatives in the United States. This ability to simultaneously support multiple technologies in different geographical regions while reconfiguring the network to provide substantial capacity for disaster relief efforts demonstrates the robust capability and agility of the DBSD system. More importantly, it demonstrates the unique and irreplaceable capabilities of and potential for MSS/ATC networks.

By establishing multiple platforms for advanced applications and services, DBSD's MSS/ATC system will facilitate greater mass market deployment through increased capacity, thus enabling delivery of service to far more customers than traditional satellite or terrestrial services have allowed to date. MSS/ATC networks will achieve gains in spectrum efficiency through higher density use of MSS spectrum within a specific geographic area. Through implementation of Satellite EVDO and next-generation terrestrial mobile broadband technologies, MSS/ATC networks also will help meet the growing consumer demand for competitive broadband data services, while leveraging unique MSS-based capabilities for broadband and other advanced services nationwide.

DBSD has demonstrated its commitment to the development of a robust MSS/ATC communications network through significant investment, technological innovations and real-

world validation of advanced service offering. Adopting the Commission's recommendations in the *NPRM/NOI* and quickly initiating further proceedings to eliminate regulatory barriers and enable efficient use and enhancement of MSS/ATC spectrum will stimulate additional capital investments and expedite deployment of new and innovative services consistent with the public interest.

III. THE COMMISSION SHOULD ADOPT ITS PROPOSALS TO SPUR BROADBAND USE OF MSS SPECTRUM

The Commission should move swiftly to remove regulatory obstacles that restrict full and efficient use of MSS spectrum, limit technological innovation, and fail to promote capital investment. Specifically, DBSD supports MSS spectrum leasing for terrestrial services in order to ensure optimal spectral use and facilitate market-driven deployment of advanced satellite-based broadband services and technologies. The Commission should also add co-primary terrestrial fixed and mobile service allocations to the 2 GHz MSS band. These allocations will lay the groundwork for providing 2 GHz MSS licensees the ability to develop and deploy hybrid satellite/terrestrial communications networks that, through efficient use of spectrum, can meet the growing demand for broadband wireless services.

A. The Commission Should Apply Rules Facilitating MSS Spectrum Leasing For Terrestrial Services

1. *MSS Spectrum Leasing For Terrestrial Services Offers Substantial Public Interest Benefits*

Spectrum leasing arrangements for terrestrial use of MSS and Wireless Radio Service spectrum should be treated consistently because “technological advancements will enable MSS licensees and their spectrum lessees to use their ATC authority to provide mobile broadband services similar to those provided by terrestrial mobile providers and enhance competition in the

mobile broadband sector.”¹⁴ In its *NPRM/NOI*, the Commission seeks to provide “greater regulatory predictability and parity” by applying existing secondary market spectrum leasing rules and policies to MSS spectrum leasing for terrestrial services.¹⁵

As the Commission noted in its *NPRM/NOI*, secondary market leasing rules and policies are intended to serve numerous policy and public interest objectives, including “promot[ing] more efficient, innovative, and dynamic use of the terrestrial spectrum, expand[ing] the scope of available wireless services and devices, enhanc[ing] economic opportunities for accessing spectrum, and promot[ing] competition.”¹⁶ These same objectives will be served by extending existing secondary market rules and policies to terrestrial use of MSS spectrum.¹⁷

2. All Of The Secondary Market Leasing Options, Including *De Facto* Leasing, Should Apply To MSS Spectrum Leasing For Terrestrial Services

To achieve the full benefits of the secondary market spectrum leasing framework, the Commission should allow MSS/ATC spectrum licensees and lessees the flexibility to choose from the full range of leasing options permitted under the existing framework, including spectrum manager and *de facto* transfer leasing. In its *NPRM/NOI*, the Commission seeks comment on whether only a subset of leasing options should be applied to MSS spectrum leasing

¹⁴ See *NPRM/NOI* ¶ 22.

¹⁵ See *id.* ¶ 17. The Commission is not proposing to extend the secondary market leasing framework to MSS spectrum leases for satellite services. *Id.* ¶ 17 n.54. Thus, these leases do not require prior Commission approval under the Commission’s long-established satellite leasing policy. See *Establishment of Domestic Communication-Satellite Facilities by Nongovernmental Entities*, 22 FCC2d 86 (1970); *Amendment to the Commission’s Regulatory Policies Governing Domestic Fixed Satellites and Separate International Satellite Systems*, Report and Order, 11 FCC Rcd 2429, ¶ 50 (1996).

¹⁶ See *NPRM/NOI* ¶ 18.

¹⁷ See *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 20604, ¶ 2 (2003) (“*Secondary Markets First Report and Order*”).

for terrestrial services.¹⁸ No basis exists, however, for limiting secondary market flexibility in this way.

In adopting the existing framework to allow *de facto* transfer leasing, the Commission acknowledged many commenters' concerns that a limited leasing framework permitting only spectrum manager leasing "could actually impede the development of secondary markets" and deter licensees from leasing spectrum "if their lessees' non-compliance could threaten the licensees' ability to hold the license."¹⁹ The Commission thus found that "[f]acilitating this type of [long-term *de facto*] leasing arrangement pursuant to streamlined processing provides licensees and spectrum lessees a sought-after option distinctly different from the [spectrum manager leasing option], and should further enhance the development of more robust secondary markets in spectrum usage rights."²⁰ The Commission further found that "[t]here are legitimate specific needs that can most easily and efficiently be addressed through these kinds of short-term [*de facto*] leasing arrangements" and that "the public interest would be served by facilitating short-term *de facto* transfer leasing arrangements that meet entities' temporary needs for access to spectrum."²¹ These Commission findings are equally applicable to MSS spectrum leases for terrestrial services and should not be precluded merely because the ATC rules require the provision of integrated MSS/ATC services.

3. MSS/ATC Leasing Arrangements Should Not Be Assumed To Raise Potential Competitive Concerns

In its *NPRM/NOI*, the Commission seeks comment on whether MSS/ATC spectrum leases raise the same potential competitive concerns as other leases involving terrestrial mobile

¹⁸ See *NPRM/NOI* ¶ 24.

¹⁹ *Secondary Markets First Report and Order* ¶ 130.

²⁰ *Id.* ¶ 134.

²¹ *Id.* ¶ 163.

spectrum.²² Under Section 1.948(j)(2)(A) and 1.9020(e)(2)(A) of the Commission's rules, certain spectrum manager and long-term *de facto* transfer leases raise potential competitive concerns and do not qualify for immediate processing or approval procedures if the lessee also holds a 10 percent or greater interest in Wireless Radio Service spectrum within the same geographic area covered by the leased spectrum.²³ Because MSS/ATC spectrum is inherently nationwide in coverage, application of these rules to MSS/ATC leases would deter existing terrestrial mobile providers from leasing MSS/ATC spectrum because their spectrum holdings automatically would disqualify them from immediate processing or approval procedures.

To facilitate MSS/ATC leasing, the Commission should allow these leases to qualify for immediate processing or approval procedures, regardless of the lessee's interests in other terrestrial spectrum. The market for MSS/ATC services warrants special consideration, particularly in applying certain competition policies to MSS/ATC leasing arrangements. In adopting the ATC rules, the Commission found that "terrestrial CMRS and MSS ATC are expected to have different prices, coverage, product acceptance and distribution; therefore, the two services appear, at best, to be imperfect substitutes for one another that would be operating in predominately different market segments."²⁴ The Commission further stated that "[o]nly a limited portion of customers desiring terrestrial service are likely to be interested in

²² See *NPRM/NOI* ¶ 24.

²³ See 47 C.F.R. §§ 1.948(j)(2)(i)(A), 1.9020(e)(2)(i)(A). In the *Secondary Markets Second Report and Order*, the Commission suggested that long-term *de facto* transfer leases would be disqualified from immediate approval procedures if they create a geographic overlap with ATC spectrum in which the lessee holds an attributable interest. See *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, 19 FCC Rcd 17503, ¶ 26 (2004). The Commission, however, apparently did not include ATC spectrum within the scope of Sections 1.948(j)(2) and 1.9020(e)(2) of its rules.

²⁴ *ATC Order* ¶ 39.

supplementary MSS services, which suggests that the two services will not be competing in the same market segment.”²⁵ In view of these findings and the goals of the Broadband Plan to facilitate broadband use of MSS spectrum, the Commission should determine that ATC leases do not raise the same competition concerns raised by certain terrestrial mobile leases and should not be subject to Section 1.948(j)(2)(A) or 1.9020(e)(2)(A) of the Commission’s rules.

B. Adding Terrestrial Service Allocations To The 2 GHz MSS Band Will Lay The Groundwork For Additional Flexibility

DBSD supports the Commission’s proposal to add co-primary fixed and mobile allocations to the 2 GHz MSS band. As the Broadband Plan expressly contemplates, the additional allocations are intended to “provide the *option of flexibility to licensees* to provide stand-alone terrestrial services using the spectrum.”²⁶ These additional allocations also will bring the allocation for the 2 GHz MSS band “into harmony with international allocations.”²⁷ Globally harmonized spectrum, in turn, will provide opportunities for standardized services, economies of scale, and reductions in service costs.

Contrary to its stated intent to provide additional flexibility to 2 GHz MSS licensees, however, the Commission also proposes to prohibit re-assignment of any returned or cancelled 2 GHz MSS spectrum to other MSS licensees.²⁸ This proposal effectively could reduce the amount of spectrum allocated for MSS and deny the very flexibility that the Commission has found that MSS licensees should have in determining optimal use of the spectrum.

Although existing 2 GHz MSS systems are authorized to use only a portion of the 40 MHz of spectrum allocated for MSS domestically, they are capable of operating across the entire

²⁵ *Id.* ¶ 40.

²⁶ *Broadband Plan* at 88 (emphasis added).

²⁷ *See NPRM/NOI* ¶ 10.

²⁸ *See id.* ¶ 15.

2 GHz MSS band and thus could offer greater capacity immediately if additional 2 GHz MSS spectrum becomes available. Prohibiting 2 GHz MSS licensees from acquiring any returned or cancelled 2 GHz MSS spectrum would unnecessarily limit the potential for hybrid satellite/terrestrial communications systems to provide a robust offering of reliable and ubiquitous mobile broadband services to consumers, as well as critical lifeline and primary communications services particularly to unserved or underserved areas and during emergencies. Such limitation is likely, if not certain, to correspondingly limit the availability of necessary capital investment needed to build out hybrid MSS/ATC mobile broadband networks, which is inconsistent with the stated objectives of the Broadband Plan. Ultimately, the resulting limitations on access to services and capital investment will harm consumers and disserve the public interest.

Additionally, preserving returned or cancelled 2 GHz MSS spectrum for MSS/ATC use would offer the best opportunity for preserving the limited MSS spectrum available both domestically and internationally. Although there has been increased recognition that globally harmonized satellite spectrum is vitally important, it is not certain that additional spectrum reservations for MSS will be adopted by the International Telecommunication Union in the future.

IV. THE COMMISSION SHOULD CONSIDER ADDITIONAL MEASURES TO INCREASE THE UTILIZATION, INNOVATION, AND INVESTMENT IN MSS SPECTRUM

DBSD supports the Commission's broader inquiry to examine additional measures that will increase the utilization, innovation, and investment in terrestrial use of MSS spectrum, while also preserving robust, market-wide MSS capabilities.²⁹ Terrestrial mobile providers have

²⁹ *Id.* ¶ 26.

acknowledged the lack of available spectrum capacity to support the growing demands of data-intensive mobile broadband users. Cisco forecasts mobile data traffic to grow to more than 700 petabytes per month by 2014, compared to approximately 17 petabytes per month in 2009.³⁰ The Broadband Plan attributes the exponential growth in traffic to increased adoption of mobile, Web-connected devices and increased data consumption per device.³¹ The Broadband Plan further anticipates “a huge increase in machine-based wireless broadband communications over the next several years,” as a result of the proliferation of “smart” devices connecting to ubiquitous, high-speed, low-latency, wireless packet data networks.³² Moreover, next-generation mobile broadband networks are expected to support higher data throughput rates, lower latencies, and more consistent network performance, thus increasing the range of mobile applications and devices that can be used, as well as the demand for mobile broadband services from consumers, businesses, and public sector users.³³ Consequently, the growing consumer demand for information anywhere, anytime and increasing data consumption trends are placing a strain on existing wireless networks and available spectrum.

The Commission should provide a regulatory environment that will cultivate and support the market conditions for profitable investment in and deployment of MSS/ATC services—namely, the unique ability to provide ubiquitous satellite coverage coupled with terrestrial capacity. Additional measures to provide MSS operators the ability to more efficiently use spectrum as part of a hybrid satellite/terrestrial mobile broadband service offering would

³⁰ See Cisco Systems White Paper, *Cisco Visual Networking Index: Global Mobile Data Forecast Update 2009-2014* (Feb. 9, 2010), available at http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.pdf.

³¹ *Broadband Plan* at 77.

³² *Id.*

³³ *Id.*

stimulate further capital investments in the sector and accelerate the deployment of new and innovative services.

A. The Commission Should Explore Measures To Relax ATC Gating Criteria

The Broadband Plan acknowledges that “the ATC gating criteria have made it difficult for MSS providers to deploy ancillary terrestrial networks, as well as to establish partnerships with wireless providers or other well-capitalized potential entrants.”³⁴ These criteria impose significant additional costs that otherwise could be invested in expediting deployment of new and innovative services. In view of these restrictions and the associated costs of compliance without corresponding consumer benefits, the Commission should promptly initiate further proceedings to consider relaxing the ATC gating criteria in order to ensure optimal use of the spectrum, stimulate additional capital investments, and facilitate deployment of new and innovative services. Providing more permanent relief from certain ATC gating criteria could provide greater regulatory certainty and stimulate the long term capital investments that are necessary for the MSS bands to be fully and efficiently utilized by consumers in the United States.

In exploring measures to relax the ATC gating criteria, the Commission should specifically consider ways to permit MSS licensees and their potential lessees to take advantage of the additional flexibility that the Commission intended to provide under its proposal to add co-primary fixed and mobile wireless allocations. Relaxing or removing certain ATC gating criteria, along with allowing additional options for leasing and other uses of the spectrum, could offer a quickly achievable, yet effective means of promoting wireless broadband growth and investment. Given the importance of the National Broadband Plan’s goal of ensuring sufficient

³⁴ *Id.* at 88.

spectrum for broadband services in the near future, the Commission should proceed expeditiously to issue a notice of proposed rulemaking to relax ATC gating requirements that serve to prevent or delay deployment of broadband services.

B. The Commission Should Maintain J-Block Adjacency To Provide Wireless Broadband Options

As the Commission noted, the potential to integrate 2 GHz MSS spectrum with the AWS-2 paired "J" block at 2020-2025 MHz and 2175-2180 MHz will help attract new investment and deployment of new mobile broadband networks in the 2 GHz band. The J Block is best suited as part of a valuable AWS pairing and should remain adjacent to 2 GHz MSS allocation for the great potential this spectrum has for wireless broadband and integration with MSS/ATC services in the 2 GHz MSS band.

The Commission previously found that AWS entrants in the proposed J Block would benefit from the design of adjacent-band MSS/ATC user equipment “which in turn [would] allow for potential economies of scale and generally promote the more rapid deployment of new service offerings.”³⁵ Maintaining 2020-2025 MHz and 2175-2180 MHz as an uplink/downlink spectrum pairing is crucial to the development of services in the AWS bands and could lead to strategic opportunities for wireless broadband services including the 2 GHz MSS licensees.³⁶ Maintaining J Block adjacency to the existing 2 GHz MSS assignment and harmonizing service

³⁵ *Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order, 19 FCC Rcd 20720, ¶ 46 (2004).

³⁶ In alternative proposals for AWS spectrum, a potential result is the “stranding” of lower J Block (2020-2025 MHz) without a corresponding pair. If this were to occur, the Commission should still permit the use of mobile devices in this spectrum as an extension of 2 GHz MSS/ATS spectrum. However, unpaired use would not be the optimal configuration for this band.

rules for terrestrial use would also create opportunities for nationwide services that need larger spectrum blocks for future advanced services.³⁷ In addition, device and other equipment manufacturers will be able to take advantages of the scale and proximity to other AWS and PCS bands to drive down equipment costs, and similarly reducing deployment costs.³⁸

V. CONCLUSION

Based upon the foregoing, DBSD urges the Commission to apply the secondary market leasing framework to terrestrial use of MSS spectrum. The Commission should also add co-primary terrestrial fixed and mobile allocations to the 2 GHz MSS band. Finally, DBSD urges the Commission to initiate further proceedings expeditiously to eliminate additional regulatory barriers and provide greater flexibility to enhance the value and use of MSS spectrum, specifically including 2 GHz MSS spectrum. These Commission actions are crucial to ensuring more efficient and cost-effective use of MSS spectrum, as well as stimulating the capital investments required for swift deployment of the mobile broadband networks envisioned under Broadband Plan.

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³⁷ For example, the progression to 4G technologies may require appropriately sized bands, including larger blocks to accommodate wider channel sizes. *Broadband Plan* at 78.

³⁸ Spectrum policy is the most important lever government has to help ensure wireless and mobile broadband thrive. Efficient allocation of spectrum consistent with the public interest will maximize its value to society. It will lower network deployment costs, making it easier for new companies to compete and enabling lower prices, more investment and better performance. *Id.* at 9-10.

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